



California Academy of Sciences

FY17 Annual Report

July 1, 2016–June 30, 2017



September 1, 2017

Dear Friend of the Academy,

We are delighted to share our Fiscal Year 2017 Annual Report, reflecting an extraordinary year at the California Academy of Sciences. Thank you for being an essential part of our community of supporters—**Friends, Platinum Circle, Planned Giving, and Institutional Giving**. Together, we are creating a more sustainable, thriving world—one where human ingenuity and data-driven science are revealing the wonders of nature and catalyzing powerful solutions to critical environmental challenges.

In 2017 the Academy went BIG—advancing our impact on a local, national, and global scale.

As Washington, D.C. stepped back on environmental leadership, the Academy stepped up as a global leader in science and sustainability, helping to address some of the world's most pressing problems. We partnered with the **March for Science** at national events in Washington, D.C. and San Francisco, standing up for science and how it serves the world. We leveraged our leadership in **fossil fuel divestment** to become the **first major U.S. museum to join the Paris Accords**—and will go even further by reducing our net greenhouse gas emissions to zero by 2025.

And this is just the beginning. The Academy is proud to demonstrate how museums can lead the way to building a climate-smart and resilient future for all people. Our inspiring message is resonating: attendance in 2017 exceeded projections; at the same time, we achieved the largest social media following—some 2.2 million—of all museums worldwide in our arena (among science, natural history, tech museums, zoos, and aquariums).





Our impact is growing. Thanks to your support, the Academy's Big Idea initiatives—launched in 2016 to address urgent environmental challenges—flourished in 2017. **Academy for All** gave back to our local communities by making the Academy's world-class exhibits and programs accessible to all. Our **Environmental Literacy Initiative** provided state-of-the-art environmental education materials to classrooms in all 50 states and 71 countries.

Hope for Reefs advanced global coral restoration and conservation efforts and sealed a game-changing **partnership with The Nature Conservancy**. And our digital media platform, **bioGraphic**, published 120 visually-stunning science and nature stories that reached a vast global audience—generating more than a billion online impressions worldwide.

Now more than ever, we must work together to build a more sustainable future. To that end, the Academy is mobilizing citizen scientists in the U.S. and around the world to enjoy and protect nature by using our **iNaturalist** digital platform; we are leading **global scientific expeditions** and activating powerful new partnerships; we are engaging the public through compelling exhibits and **educational programs**; and we are empowering people to amplify their voices in support of the critical role that science plays in all of our lives.

We are pleased to share our **FY17 Financial Statements** (a full audit will be available upon request by December). Under the guidance of our **Trustees**, we ended the year on a high note—thanks to stellar exhibits, high attendance, and lower costs. Our FY18 goal is another successful year with a balanced budget and less than five percent draw on our endowment.

We owe our success to your generous contributions, continued partnership, and visionary belief that together we can create a brighter future. Thank you for joining us in this vital mission!

Sincerely,



Jon F

Jonathan Foley

EXECUTIVE DIRECTOR

WILLIAM R. AND GRETCHEN B. KIMBALL CHAIR

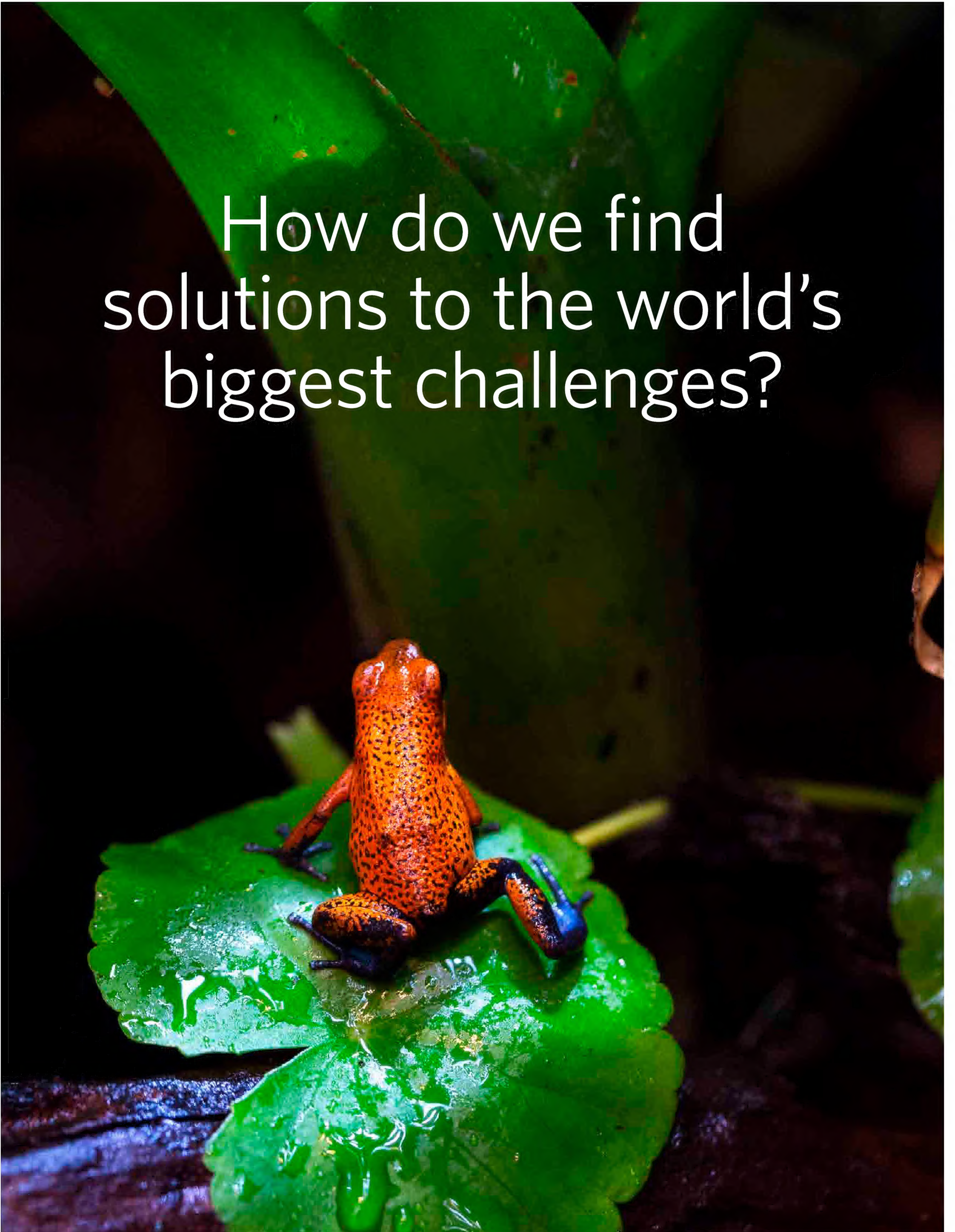


Jerome

Jerome C. Vascellero

CHAIR, BOARD OF TRUSTEES

How do we find
solutions to the world's
biggest challenges?



By letting science serve people and the planet.

In a world where all life is interconnected, the California Academy of Sciences welcomes people of all backgrounds and beliefs to experience the wonders of nature and be reminded of our collective future. More than a world-renowned museum, we are a global science and sustainability leader, working to manifest a brighter, more resilient future for all.

Thanks to your partnership,

we are energizing our mission to explore, explain, and sustain life on Earth with a series of powerful new Big Idea initiatives that are already making a Big Impact.





Academy for All: Giving Back to our Local Communities

The Academy floor is buzzing every day with children and families exploring, discovering, and learning. They are mesmerized by Claude the albino alligator; enchanted by butterflies floating overhead in our four-story rainforest; and awed by the world's deepest indoor coral reef, teeming with vibrant sea creatures.

We believe that everyone should have access to the wonders of science and nature. But while the San Francisco Bay Area has enjoyed unprecedented financial abundance in recent years, many residents have not. **Academy for All** gives back to our local communities—with a special focus on youth—by removing barriers



Careers in Science youth interns are *three times* more likely to pursue a career in science, technology, engineering, and math (STEM) than their peers nationally.

to museum admission, including cost, access, language, and culture. The Academy welcomed more than 225,000 visitors last year through **free and reduced-price admission programs** like Neighborhood Free Weekends and Quarterly Free Sundays—including 150,000 on school field trips.

Academy for All builds on our long-standing commitment to provide access to science education for youth from backgrounds that are underrepresented in the sciences. For 20 years, **Careers in Science** internships have made a critical difference for hundreds of San Francisco high school students in developing their pursuit of STEM careers. **Teen Science Night**—the world’s largest museum-based teen science event attended by more than 1,600 youth—

and **Teen Advocates for Science Communication** provided many more young people with free access to transformative science learning and discovery experiences, revealing a world of possibilities as we grow a science-literate next generation.



Academy for All is all about celebrating diversity and inclusion. It’s about breaking down barriers to science education.

—**Leah van der Mei**
Director, Guest Operations

The Academy’s **2017 Big Bang Gala** raised \$2.7 million, including \$512,000 in crowdfunding to support Academy for All. Featured speakers included **Dr. Katharine Hayhoe**, a leading climate scientist and evangelical Christian who inspires people of all beliefs and backgrounds to care about our shared environmental future—reflecting Academy for All’s inclusive mission.



Environmental Literacy Initiative: Expanding Science Education for All

We protect what we love. Our goal is to cultivate the next generation of passionate science and sustainability leaders by connecting young people with the wonders of science and nature. And we seek to empower youth to understand and help solve today's environmental challenges.

The Academy's **Environmental Literacy Initiative** is addressing the critical need for K-12 science education by providing free, high-quality,

Next Generation Science Standards-aligned environmental education materials, used by students and teachers in all 50 states and 71 countries.

Beyond our museum walls, we are transforming science learning and environmental literacy on a global scale. Leveraging our reputation as a West Coast hub for teacher professional development, we provide educators across the globe with free

access to world-class digital productions to inspire the next generation of bright, science-literate citizens. For example, **Flipside Science** is a series of fun, solutions-oriented, culturally-relevant science videos created by and for teens in our Science and Environmental Media Lab. We also build science lessons into our **award-winning planetarium shows** for classroom use. Last year, our digital educational programming reached over 3 million teachers and potentially as many as 100 million students worldwide.



The Academy's outdoor, discovery-driven **Science Action Club** is growing by leaps and bounds—thanks to our unique blend of online and in-person training and national partnerships. The dynamic curriculum integrates hands-on activities with citizen science projects that spark

curiosity, enhance self-confidence, and develop life-long interest in science and the natural world—engaging youth in remote Alaskan villages, North Carolina cities, and everywhere in between!

Last year, Science Action Club engaged 15,000 youth in 750 Clubs in 200 cities in 17 states.





Hope for Reefs: Global Partnerships for Powerful Solutions

The Academy's ambitious goal is to help save coral reefs in this century for future generations.

With nearly 75 percent of global reefs endangered—and 25 percent already lost—due to habitat destruction, overfishing, pollution, changing climate, and ocean acidification, our **Hope for Reefs** initiative is urgent.

Together with a growing network of partners, the Academy is leveraging our scientific expertise,

world-leading ocean exploration skills, on-the-ground conservation efforts, world-class aquarium and coral-culturing facilities, and innovative educational platforms to give these critical marine ecosystems the science-based help—and global attention—they need to thrive.

Over the past year, Academy scientists conducted eight research expeditions to Vanuatu, Pohnpei, the Bahamas, the Philippines, Rapa Nui (Easter

Island), Palau, and Brazil to understand how reef systems are responding to climate change and ocean acidification. Our Twilight Zone deep diving team—an elite group of highly-



scientists are mapping regional biological diversity and investigating the ecological relationships between shallow and deep reefs to learn how to help sustain these vital ecosystems.

In 2017, the Academy, **SCORE International**, and **The Nature Conservancy** launched a game-changing new partnership to restore Caribbean coral reefs. **The Global Coral Restoration Project** seeks to rapidly advance and scale restoration efforts by “seeding” reefs with sexually reproduced coral offspring—a cutting-edge, on-the-reef approach that helps maintain corals’ genetic diversity and improve their ability to adapt to future conditions.

The Academy has assembled the world’s largest collection of data from the Twilight Zone, including hundreds of unique specimens and 20 new species.

trained scientific divers—explored shadowy depths between 200 and 500 feet, rich in new species and ecosystems. From discovering how Hurricane Matthew’s devastation impacted deep reef systems in the Bahamas, to breaking deep dive records in Rapa Nui and Pohnpei, Academy

The Academy is also increasing public appreciation for coral reefs through exhibits and education. In its first year, our **Twilight Zone: Deep Reefs Revealed** exhibit earned the highest possible level of visitor satisfaction. In 2018, we will premiere a planetarium dome show that explores the captivating world of coral reef ecosystems and the science superheroes trying to protect them—and includes sustainability lessons for classrooms across the U.S. and around the world.

The Academy is gathering the sharpest minds and greatest outreach tools to help shift the coral reef story from tragedy to hope.

— Dr. Luiz Rocha

Curator of Ichthyology and Hope for Reefs co-leader



bioGraphic:

Communicating Hope to a Global Audience

Stories have the power to change the world. *bioGraphic* is the Academy's hopeful response to a frenetic 24-hour news cycle that too often paints doom and gloom scenarios about our collective future on Earth. *bioGraphic* stories engage, inspire, and surprise—creating a deeper appreciation for, and a more thorough understanding of, Earth's wondrous biological diversity.


With science-rich, compelling narratives anchored in world-class journalism, *bioGraphic* pulsates with immersive, visually-stunning content that features unique global locations, exceptional scientists and innovators, and positive sustainability

Since launching, *bioGraphic* has published 155 stories covering all seven continents and 52 countries.

actions. From underwater imagery of **whale superpods** in the Indian Ocean, to immersive media revealing **how the Amazon rainforest “breathes,”** *bioGraphic* stories make an impression.

In its first year, *bioGraphic* reached a vast, global audience and excelled at engaging new audiences—including women, youth, and international readers. *bioGraphic* partnered with nearly 50 distribution outlets—among them *The Atlantic*, the *Washington Post*, *Scientific American*, *The Guardian*, and *WIRED*—and generated more than a billion online impressions worldwide. Resounding interest from teachers inspired the Academy's in-house educators to develop **interactive learning resources** for classrooms based on *bioGraphic* content.





**The Academy is
so much more than
our Big Ideas.**

FY17 HIGHLIGHTS:

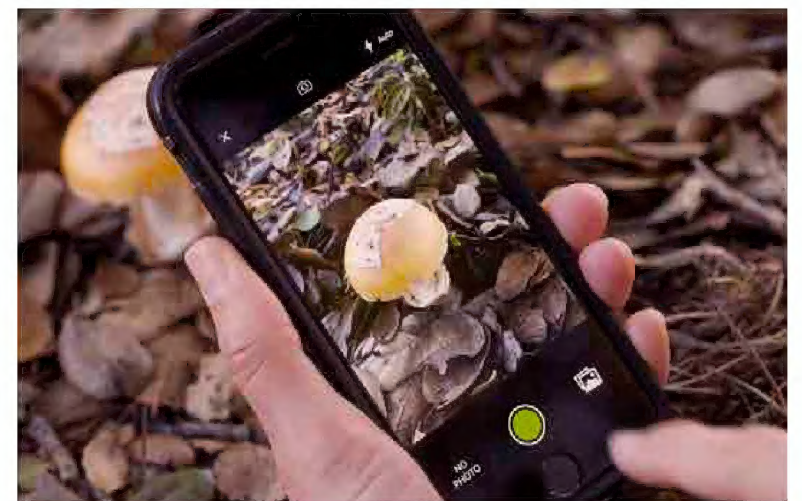


UNVEILED

two new exhibits. ***Gems & Minerals Unearthed*** features 400 dazzling geologic specimens from the Academy's renowned collection that highlight how minerals have both captivated and advanced civilizations. ***Pterosaurs: Flight in the Age of Dinosaurs*** showcases the massive flying reptiles who ruled the skies for 150 million years when dinosaurs walked the Earth.

MOBILIZED

citizen scientists around sustainability missions like ***Snapshot Cal Coast*** and ***City Nature Challenge***, using ***iNaturalist***, the Academy's digital observational and social networking tool. iNaturalist has amassed more than 5 million crowd-sourced observations globally—data that helps scientists map and understand critical shifts in ecosystems in order to develop solutions to real-world challenges.



CHAMPIONED

women in the sciences. The Academy has long been a leader in inclusion, and we continue to work hard to close opportunity gaps and change perceptions of who is a "scientist." Our two newest curators who joined last year are ***Dr. Rebecca Albright*** and ***Dr. Nathalie Nagalingum***.

ENGAGED

non-scientists of all ages. With a staff that includes 170 science educators and more than 300 highly trained ***docents***, we logged more than 3 million in-person public engagements last year.



FY17 HIGHLIGHTS:



MARCHED

in support of science. The Academy partnered with the **March for Science** in San Francisco and Washington, D.C. to raise awareness about scientific integrity and humanity's shared environmental future.

ILLUMINATED

the natural world. In its third year, **BigPicture** revealed the power of images to inspire environmental stewardship and celebrate life on Earth. A panel of world-renowned photographers and photo editors selected 48 winners from more than 5,000 entries from 33 countries.



2016 Grand Prize photo by Maroesjka Lavigne



IDENTIFIED

133 new species: one bee fly, 43 ants, 36 beetles, one sand wasp, four spiders, six plants, 23 fishes, one eel, one shark, seven nudibranchs, five fossil urchins, one fossil sand dollar, one coral, one skate, one African lizard, and a new bird virus.

CREATED

unique science experiences. We sparked imaginations and made lasting connections at events like **Nightlife**, **SuperNatural**, **Penguins and Pajamas**, **Teen Science Night**, and the **Big Bang Gala**, as well as 18 member events that drew 600 attendees.



A photograph of a penguin swimming underwater. The penguin is in the center, facing left, with its flippers extended. The water is a deep blue, and there are some bubbles and light reflections. The text "Thank You" is overlaid in white at the top.

Thank You

Thank you for sharing our vision of a better future—one where human ingenuity and applied science are driving solutions to protect and sustain life around the world. Your partnership is essential to the success of the Academy's robust research, education, and public programs. We look forward to another year of scientific exploration and discovery with you!